

ABSTRACT

A hybrid integrated circuit fabrication arrangement in which an insulating substrate member and its metallic substrate carrier are mated with precision through use of computer controlled machining performed on each member. A combination of disclosed specifically tailored software and commercially available software are used to generate code used to control a precision milling machine during the fabrication of substrate and substrate carrier members. The precision mating of substrate and substrate carrier enable disposition of a precision recess in the substrate carrier and the location of recess pillars and pedestals (the latter being for integrated circuit die mounting use) at any carrier recess location desirable for electrical, thermal or physical strength reasons. Enhanced electrical thermal and physical properties are achieved in hybrid devices fabricated according to the invention especially when compared with devices having the limited availability of comparable elements afforded by previous hybrid fabrication arrangements.

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